THE PLAGUE OF THE PHILISTINES

By J. F. D. SHREWSBURY, Department of Bacteriology, University of Birmingham

(With 1 Figure in the Text)

'And the hand of the Lord was heavy upon the Azotians, and he destroyed them, and afflicted Azotus and the coasts thereof with emerods. And in the villages and fields in the midst of that country, there came forth a multitude of mice; and there was the confusion of a great mortality in the city.

And he smote the men of every city, both small and great, and they had emerods in their secret parts. And the Gethrites consulted together, and made themselves seats of skins.

The men also that did not die were afflicted with the emerods....'

Vulgate, I Kings v. 6, 9, 12.

So runs the record, in the sonorous language of the Old Testament, of a pestilence that would seem to have exerted ultimately a decisive effect upon world history: to be, indeed, in that respect, possibly one of the most decisive events of all time. The immediate effect of the pestilence is obvious from the biblical record. It induced the victorious Philistines to restore to the Israelites the Ark of the Covenant which they had captured from them, and to endeavour to placate the wrath of Yahweh, the God of the Israelites, by making peace offerings to him.

'According to the number of the provinces of the Philistines you shall make five golden emerods, and five golden mice; for the same plague hath been upon you all, and upon your lords. And you shall make the likeness of your emerods, and the likeness of the mice that have destroyed the land;....'

VULGATE, I Kings, vi. 5.

The scene of this pestilence was Palestine, that 'cock-pit' of the ancient world, where Asia and Africa contested for the hegemony of the early civilizations. 'Palestine was the commercial, military and political centre of the ancient world, and on it focused all the greatest movements of the peoples' (Osterley & Robinson, 1932). It comprised the narrow strip of comparatively fertile land lying between the mountains and the desert on the one hand, and the Mediterranean Sea on the other, the possession of which, Osterley & Robinson (1932) assert, was vital to any aspiring conqueror of the

ancient world passing from Europe or Asia to Africa, or vice versa.

The contestants were the Hebrews, originally a nomad people, and the Philistines, already, then, one of the most highly civilized peoples of the ancient world. The Hebrews, according to Manson (1946), were originally an 'Armenoid' people hailing from the region of modern Kirkuk, who had adopted the Semitic speech and culture, and who irrupted into the 'Fertile Crescent', and thence pushed south-westwards into Palestine, in the middle of the second millennium. They found the land of their adoption inhabited by the Amorites, a Semitic people, who worshipped Baal, and who were in a much more advanced stage of civilization than themselves. Archaeology has proved, says Manson (1946), that the early dwellers in Palestine and Mesopotamia built superb temples and palaces, and had a flourishing agriculture and a fine educational system, with good schools and 'excellent instruction in reading, writing, arithmetic, history, geography, astronomy and other subjects. Along with this ancient civilization there went a widespread, well-organized system of commerce, with connexions by wagon or caravan routes for a thousand miles and more from east to west....'

Abraham, the leader of the Hebrews, with a number of their nomad clans, entered Canaan, the southern portion of Palestine (Fig. 1), about 2090 B.c. (Manson, 1946). A long, fluctuating struggle followed before the more virile nomads secured undisputed authority over Canaan, and it is possible that they might have failed but for the difference in religious beliefs between them and the Canaanites. The latter's worship of Baal, in the form of local cults was, according to Manson (1946), a disintegrating force, whereas the Israelites possessed, after the Exodus, 'an unusual cohesion and strength in the worship of the one God, Yahweh' (Shrewsbury, 1947).

The irruption of the Hebrews into the 'Fertile Crescent' appears to have been followed, not long afterwards, by a mass migration of a mixed horde of northerners and Syrian 'Semites', who swept through Palestine with their new and irresistible weapon, the horsed chariot, and erected in Egypt, about 1750 B.C., the foreign dynasty of the Hyksos

(Manson, 1946). It seems probable that this wave swept the southern portion of the Hebrew confederacy along with it into Egypt because, as Osterley & Robinson (1932) remark: 'the hostility to the Asiatics roused by the Hyksos dominion was so great that it is almost inconceivable that any king of the eighteenth dynasty should have welcomed a Semitic tribe for any reason whatever....' Some three hundred years later, the Egyptians successfully rebelled against the Hyksos dominion and ejected their alien overlords, with the consequence that the Hebrews were also forced to leave Egypt. The date of their exodus has been fixed at about 1445 B.C. (Manson, 1946), and after a migration of uncertain duration they returned to Canaan, bringing with them the Mosaic Code of Laws and a fervent faith that they were the chosen people of Yahweh.

The origin of the Philistines is obscure. Osterley & Robinson (1932) suggest that they were the remnants of the ancient Minoan civilization which had its capital at Cnossos in Crete, and which had disintegrated under the impact of the irruption of barbaric Greek tribes from the north. According to these authors, they attempted to invade Egypt, but were repulsed by Rameses III about 1190 B.C., and then moved northwards and established themselves in five loosely connected city states on the coast of Palestine. Manson (1946) says that more recent discoveries suggest that their original home was somewhere in Cilicia or Cappadocia, and not in Crete as had previously been supposed. He agrees with Osterley & Robinson that their main forces reached Canaan about 1190 B.C., but he opines that they probably had small settlements along the Palestinian coast in the fourteenth and thirteenth centuries. He believes that their invasion of Palestine was only an incident in a great movement of 'Sea-Peoples', successive waves of whom marched through Asia Minor, destroyed the Hittite Empire, and then attacked Egypt. There, however, they were defeated both on land and sea by Rameses III. who then permitted the Philistines to establish themselves in Canaan, probably as garrison troops sworn to his service. 'The Philistines themselves were', he says, 'the last wave of migrants to enter Palestine (which owes its name to them) till many centuries later the Mohammedan conquest peopled a large part of it from the desert....All that we really know about them is that they had absorbed much of the Aegean and Achaean civilizations, as both their pottery and their armour bear witness, and that they appear to have been settled as garrisons in Palestine after their conquest by the Pharaoh, Rameses III, only to assert their independence when the power of Egypt declined.

Whatever their origins, all authorities seem to be agreed that the Philistines were a powerful race of doughty fighters, well-equipped with the military resources of an advanced civilization, and apparently more than a match for the semi-civilized Israelites. They appear to have suffered, however, from the chronic failure of their proud and independent city states to form an effective and permanent union, and from the poverty of their religious beliefs. which conferred upon them nothing of the cohesion and purpose that the Israelites secured from their worship of Yahweh. Nevertheless, there can be no doubt that the Philistines were the most dangerous local adversaries of the Israelites in their struggle for the domination of Palestine, and, at the time of the record in I Kings, they had inflicted what should have been an irreparable defeat upon the latter people. Indeed, but for the advent of the pestilence, it is improbable that the Israelite confederacy could have continued to exist, because the mainspring of their confederate life was broken with the loss of the Ark of the Covenant.

What then was the nature of the pestilence which caused the Philistines, in the hour of their triumph, to restore the Ark to the vanquished Israelites?

The biblical record provides three clues to its identification. It began among an army in the field and spread to the civilian population with the return of the troops to their homes; it was accompanied by the development of 'emerods' in the 'secret part' of the body, and it induced the Gethrites to make themselves seats of skins. The same disease also spread among the Hebrew clan who received the Ark back from the Philistines, because the record adds: 'But he the Lord slew the men of Bethsames, because they had seen the ark of the Lord: and he slew of the people seventy men, and fifty thousand of the common people' (Vulgate, I Kings vi. 19).

A reasonable inference from this passage would seem to be that the disease first spread to a contingent of the Hebrew army, the contingent from Bethsames, which had possibly been captured by the Philistines and had witnessed the desecration of the Ark, and was then disseminated among the civilian population by the returning warriors.

Simpson (1905) affirms that the pestilence was bubonic plague, and that the 'emerods' were plague buboes, and his assertion has been repeated by later writers. Topley & Wilson (1946), for example, assert that: 'In the 5th and 6th chapters of the 1st Book of Samuel there is an unmistakable account of bubonic plague.'* Simpson apparently founded his belief that the disease was plague on the record of the simultaneous plague of mice, because he remarks: 'Even at that distant date the disease was observed to be accompanied by an epizootic among

* I Samuel in the Authorized Version is I Kings in the Vulgate.

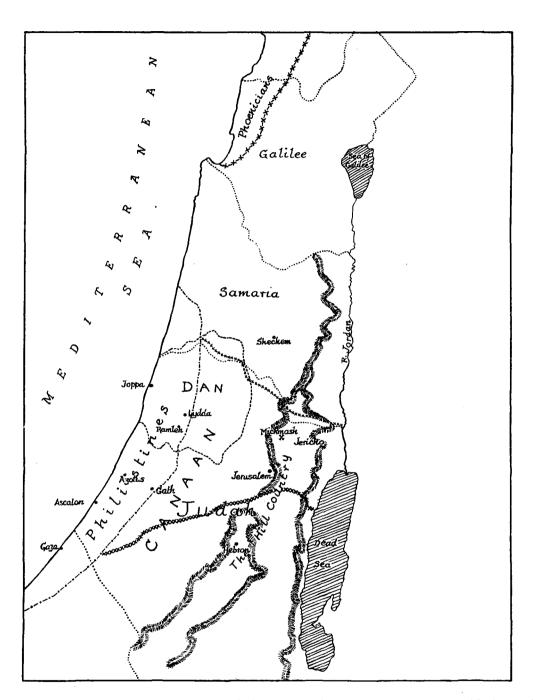


Fig. 1. Palestine, showing the relationships of the Amorite, Hebrew, Philistine and Jewish States. The Amorite Kingdom comprised the area denominated Canaan: the early Hebrew State occupied approximately the area marked Judah, which was augmented, at a date subsequent to the plague of the Philistines, by the incorporation of the northern area of Samaria. The Jewish State under the Romans comprised Judah, Samaria and Galilee. xxxxxxx Possible maximum limits of territorial dominion achieved by the Philistines.

mice....' There is no evidence, however, to warrant the assumption that there was a mouse epizootic. The biblical record states explicitly that 'in the villages and fields...there came forth a multitude of mice'. It says nothing about any mortality among the mice. In other words, it states that there was a plague of mice, not a plague among mice.

Simpson also refers to the offerings of the golden emerods and the golden mice, which the Philistines made to Yahweh, as confirming his identification of the pestilence with bubonic plague. The significance of this dual offering admits, however, of another and, I submit, a truer interpretation; which is that the Philistines recognized that, though the two plagues were synchronous, they were distinct and disconnected. If they had believed that the plague of the emerods sprang from the plague of mice, they would assuredly have made an image that incorporated, and emphasized the relationship between, mouse and emerod. The fact that they made separate replicas of the mice and the emerods must surely mean that they believed that Yahweh had inflicted two distinct punishments upon them, one of which destroyed their means of sustenance, while the other desolated their homes.

Even assuming, however, that there was a direct relationship between the plague of mice and the plague of the emerods, the assumption provides no justification for the identification of the latter as bubonic plague. It is true that mice, like all other rodents, are naturally susceptible to plague; but the fleas that mice normally harbour are feeble biters as far as the human skin is concerned, and there is no record in modern scientific literature, to my knowledge, of the mouse being responsible, under natural conditions, for the eruption of an epidemic of human plague. Simpson (1905) remarks that 'mice as well as rats are sometimes, but not often, observed to be affected during a plague epidemic', and refers to Yamagawa's report that they died of plague during the epidemic of that disease in Formosa in 1896. As mice are susceptible to plague, their death during an epidemic is not surprising; but the fact that they are attacked by Pasteurella pestis affords no justification for the assumption that they therefore normally, or even frequently, act as the natural reservoir from which that bacterium is transmitted to man. Topley & Wilson (1946) give only two casual references to the association of mice with human plague. Writing about the Egyptian epidemic of 1924, they state: 'The two rodents chiefly concerned in the spread of plague were Rattus rattus and the Cairo spiny mouse (Acomys cahirinus).' They later refer to Zabolotny's observation that endemic plague in the Steppes of south-west Russia has been traced to Spermophiles -Spermophilus musicus and S. rufiscius—and to field mice. According to Zabolotny, cases of human plague occurring in the winter, 'when the spermophiles are hibernating, appear to be due to infection from wandering field mice, which take refuge in the thatched roofs of the houses'. In the first instance, as the black rat was present, the inclusion of the spiny mouse in the human epidemic was incidental; in the second, there is no record by Zabolotny of a human epidemic arising from the association, which was an unusual one, evoked by the climatic conditions in that region.

Even for the spread of plague from the rat to man an intimate association of man and rat is essential. The brown rat is susceptible to plague, but it is rarely the source for human plague because, unlike the black rat, it never breeds in human dwellings, and its contacts with man are usually therefore too transient and irregular for the fleas it harbours to act as the vectors of Pasteurella pestis. Throughout the centuries when plague was prevalent in Europe, the black rat was primarily responsible, so far as can be ascertained, for the spread of plague to man, because it is a house-haunting species that breeds normally in human dwellings, and lives and dies therefore in close proximity to man.

The same intimate association must exist between man and mouse before the latter can possibly act as the animal reservoir for a human epidemic of plague, and the house mouse would therefore appear to be the only species of mouse that could be incriminated. The epidemiology of plague conclusively demonstrates that free-living rodents, breeding and feeding outside human dwellings, do not engender human epidemics of plague, even though the plague bacillus is widespread among them, as long as man does not deliberately interfere with them. If the Philistines had suffered from a plague of house mice, it is conceivable that an epizootic of plague among them might have given rise to a human epidemic; but the biblical record clearly refers to a plague of field mice, or voles. Wood (1869) states that it is not possible to identify the exact species of mouse that is represented by the Hebrew word akbar. 'The probable derivation of this name', he says, 'is from two words which signify "destruction of corn", and it is therefore evident that allusion is made to some animal which devours the produce of the fields, and which exists in sufficient numbers to make its voracity formidable.' Referring to the plague of mice that destroyed the crops of the Philistines, he contends that the field mouse (Arvicola arvalis), which attacks seed, growing corn and stored grain, was most probably the animal concerned. He adds that many small rodents are plentiful in Palestine. and he lists the hamster (Circetus frumentarius) which, he says, is much feared because of its ravages among the crops; the jerboa (Dipus Aegypticus); the dormouse, and the sand-rat, of each of which last two animals there are several native species. None of these rodents, however, normally enters human dwellings, or breeds in proximity to them.

The same confusion of a plague of field mice with an outbreak of bubonic plague in man, has led some writers to infer that the pestilence which afflicted Sennacherib's army, or a part of it, was plague. Sennacherib's punitive invasion of Palestine, which took place in 701 B.C. (Manson, 1946), has been immortalized in Byron's ringing verse:

The Assyrian came down like a wolf on the fold, And his cohorts were gleaming in purple and gold; And the sheen of their spears was like stars on the sea, Where the blue wave rolls nightly on deep Galilee.

As far as the identification of this pestilence is concerned, however, the biblical records are uninformative and, probably, much exaggerated. The first reference to it, in Vulgate, IV Kings v. 19, runs: 'And it came to pass that night, that an angel of the Lord came, and slew in the camp of the Assyrians a hundred and eighty-five thousand.' The second reference reads: 'And the Lord sent an angel, who cut off all the stout men and the warriors, and the captains of the army of the king of the Assyrians.' (Vulgate, II Paralipomenon xxii. 21.)

Manson (1946) says that an Egyptian army that came to the help of the Israelites was decisively defeated, and he adds: 'It seems that a detachment of his [Sennacherib's] army suffered from a sudden and terrible attack of bubonic plague, which had been endemic in the marshes on the Egyptian frontier for many centuries....' A non-medical historian, lacking the requisite knowledge about the epidemiology of plague, may be excused for such an assumption; but there is no evidence that the black rat—and presumably therefore plague also—was established in Egypt at such an early date. The earliest scriptural record that permits of a reasonable supposition that the black rat had reached Palestine from its original home in the jungles of Assam and northern Burma, would seem to be the passage in I Maccabees vi. 30 and 37. After referring to the army that Antiochus had mustered against the Jews under Judas Maccabeus, the scribe adds: And the number of his army was an hundred thousand footmen and twenty thousand horsemen and thirty-two elephants trained to battle....And upon the beast there [was]...an Indian to rule [it]. As the African elephant has not, to my knowledge, ever been trained for war, it would seem to be a reasonable presumption that Antiochus had obtained his elephants from India, and if trained Indian elephants were being imported by this time into Syria and Palestine, it seems probable that the black rat had also arrived in those countries.

To return to the pestilence that afflicted a part of Sennacherib's army; if it was anything like as

swift in its spread and in its mortality as the biblical record states, cholera surely has a much better claim than even pneumonic plague to be that pestilence, and cholera requires no animal host to sustain its epidemic spread. It is true that plague has attacked armies, but in almost every instance the afflicted army has been immobile for a time before it was attacked, either because it was besieged or was engaged in a siege. The black rat will invade and even multiply in a stationary camp, but it is not a migratory animal and it is unlikely to accompany an army that is on the move. The available evidence indicates that the contingent of the Assyrian army that was attacked was a mobile force.

The elimination of the plague of field mice from any direct relationship with the pestilence that devastated the Philistines does not, however, affect the argument that the 'emerods' were plague buboes. It is therefore necessary to consider the nature of these lesions; but this consideration must be preceded by a discussion of the significance of the phrase, 'secret part', because the Philistines were afflicted with emerods only in the 'secret part' of their bodies.

There is only one region of the body that can truly be described as a 'secret part' in the sense that it is hidden from view in the nude individual under all natural conditions, and that region is the anal region. The arm-pits are also hidden, it is true, when the arms are at rest; but a slight elevation of the arms brings them into view, whereas the buttocks must be passively separated to expose the anal region. The external genitals are visible in the nude individual of either sex, as are also the inguinal regions, and among semi-civilized peoples, living in hot climates, it is usual for the children at least to appear in public nude. Even among the adult members of the population, nudity is not uncommon, especially at certain times and at certain seasons. Plague buboes can only form where groups of lymphatic glands occur just below the skin, as in the groins and the arm-pits-the common sites for these buboes-but there are no lymphatic glands in the anal region and therefore plague buboes cannot develop there.

Osterley & Robinson (1932), after remarking upon the strict regulation of sexual behaviour in a nomad society like that of the Hebrews, add: 'One of the darkest features of the agricultural life of the ancient world is to be found in the low sexual standard set by its religion, and nearly everywhere in the ancient east we find the cult of fertility deities, involving sacramental fornication. Such a practice is not merely foreign, but utterly abhorrent, to the mind of the nomad....' Driver states that there were male and female persons attached to the temples, chiefly of Ishtar, for sacred prosti-

tution; the men seem generally, he says, to have been eunuchs, while the practice was coitus ab ano with the women in order to prevent conception. The same authority, to whom I am greatly indebted for much generous help in this connexion, states that there are frequent references to sacred prostitutes of both sexes at the old centres of the Canaanite religion, and he adds that while sodomy was prohibited by the post-exilic Hebrew Law (Leviticus xviii. 22; xx. 13), it was not prohibited by any other of the ancient codes of laws. 'The old Hebrew stories seem to reprobate the practice, but it is not prohibited in the early law; only the prophets denounce it, not so much as a moral offence as apostasy from the true God by practising what belonged to the worship of the old heathen deities, the Baalim of Canaan' (Driver).

Meissner (1907) gives three references to the practice of sodomy amongst the Assyrians, and states his belief that while that practice was apparently very prevalent among the Court officials, the bulk of the populace probably exhibited more natural sexual tendencies. Driver has provided me with an exact reference to the practice of coitus ab ano with an Assyrian priestess.* The passage states that, in order that she may not conceive, a man 'lies with her rump'. The biblical stories of Lot (Genesis xix. 5), and of the Levite at Gibeah (Judges xix. 22), clearly refer to the practice of sodomy, and there is evidence that the Hebrews at times were seduced from the worship of Yahweh to practice that of Baal (Judges xxv and xxxi).

There would seem to be a reasonable presumption, therefore, that the Hebrews were well acquainted with the practice of sodomy among the peoples with whom they came into contact in Palestine, and I believe that their abhorrence of that practice, especially after their return from exile, is the key to certain obscure passages and references in the Old Testament. It certainly invests the phrase, the 'secret part', with an augmented significance because, if my belief is valid, there can be no doubt that the anus would have a peculiar significance among the Israelites, and, particularly among those who were seduced to the worship of Baal, it would be in a very special sense the 'secret part' of the body. I therefore submit that the old Hebrew chronicler meant the anal region when he wrote that the 'emerods' afflicted only the 'secret part' of the body of the victims of the plague of the Philistines.

The nature of the morbid process designated by the word 'emerod' must now be considered.

* Handcock Cuneiform Texts, British Museum, vol. xxxI, plate 44, obverse, lines 10-11. Duplicated in Boissier, *Presages*, p. 220, reverse, line 10; and in Clay, *Babylonian Records*, Library of Pierpont Morgan, vol. rv, no. 12, line 32.

Driver states that the original Hebrew word, opel, is found in only two passages in the Bible, in each of which it occurs in the plural form, opalim. The first passage is the one that I have already quoted from I Kings; the second is found in the curses of the Law in Deuteronomy xxviii. 27. This passage reads, in the Vulgate: 'The Lord strike thee with the ulcer of Egypt, and the part of thy body, by which the dung is cast out, with the scab and with the itch: so that thou canst not be healed.' Driver states, however, that this rendering is grammatically impossible. In the Authorized Version, this passage runs: 'The Lord will smite thee with the botch of Egypt, and with the emerods, and with the scab, and with the itch; whereof thou canst not be healed.' Driver emphasizes that, whatever meaning is attached to the word opalim, it must have the same sense in the passage in I Kings and the passage in Deuteronomy, and he states that the radical meaning of opel is 'hill', so that in each of those contexts it must mean something of the nature of a swelling or protuberance, because various derivative nouns mean, or are applied to, a 'hillock', 'the buttocks', 'fatty protuberances', and a morbid process. There are, therefore, two possible interpretations of the word opalim: one is that it designates parts of the body that are naturally rounded and prominent; the other is that it refers to a morbid process that appears as rounded swellings protruding from some part of the body. We have Driver's authority, however, for the fact that the first meaning is inadmissible in the Deuteronomy passage, so that the word must designate some morbid process, and one that was a concomitant of the disease that afflicted the Philistines.

Later Jewish copyists of the original Hebrew version substituted *tehorim* for *opalim* (Driver). 'This is a late Hebrew word for "piles"; the cognate Arabic *tahara* means "ejected", and the Syriac *thara* means "dysentery", while the Syriac verb *thar* means "strained at stool" (Driver).

All the evidence indicates, therefore, that the old Hebrew chronicler employed the word *opalim* to mean 'piles'. Is the morbid process of piles, or haemorrhoids, acceptable then in each of the decisive biblical passages?

The communicable diseases that have scourged armies throughout historical times are typhus fever, typhoid fever, and dysentery, and there can be no doubt that the pestilence that afflicted the Philistines first erupted in their army, and was then disseminated by their victorious troops among the civilian population of their cities. Typhus fever and typhoid fever can be dismissed, because neither disease is accompanied by the development of swellings around the anus; but bacillary dysentery is frequently associated, because of the invariable concomitant tenesmus, with the formation of ex-

ternal piles, those rounded protuberances from the anal margins which are at first hot, red and painful, but which later often itch considerably as they resolve. It is commonly stated in medical textbooks that bacillary dysentery in hot climates is more prone to give rise to piles than is the disease in temperate ones. The usual explanation that is given is that the anal sphincter is generally more lax in individuals living in hot lands than in those living in temperate regions. As far as the passage in I Kings is concerned, therefore, 'piles' can certainly be substituted for 'emerods'; indeed, it is the only possible substitute, because the pile is the only external, visible lesion of dysentery, apart from the rectal discharge of blood, or blood-stained mucus, and there is no other transmissible disease that provokes the development of small round tumours in the anal region.

In the Deuteronomy passage, four morbid conditions are grouped together, namely: the botch or boil of Egypt, emerods, the scab, and the itch. The historian may be willing to accept the philological and etymological argument that has been presented that the word 'emerods' means 'piles' in both contexts; but the medical reader may well ask why 'piles' should be bracketed with diseases with which it has apparently nothing in common, except perhaps the slender connexion that each is accompanied by some degree of itching. In medical circles, piles are generally classed as a minor malady; one that interferes to some extent with the sufferer's physical well-being, and with the necessary function of defaecation, but which does not incapacitate him, or endanger his life. Moreover, the external pile is commonly a temporary lesion which often may heal without treatment, although it may recur with almost every repetition of the act of defaecation. Why then should 'emerods' be translated as 'piles' in this passage?

The correct answer, I suggest, is that the Hebrews associated the development of piles in individuals of either sex with the practice of rectal coitus, which their prophets and chroniclers, at any rate, abhorred and denounced. To such people the haemorrhoid would be a peculiarly repulsive lesion, the sign of a degrading and abominable cult, and its inclusion therefore in a group of repulsive skin diseases becomes understandable. If this suggestion is correct, the passage in I Kings becomes invested with an increased significance, because the chronicler is there emphasizing that Yahweh not only sent a plague of mice to mar the land of the Philistines, and a deadly disease to ravage their nation, but chose a disease which branded them as sodomists, the accursed worshippers of Baal. The objection may here be raised that we have no certain evidence that the Philistines worshipped Baal, but we have Manson's (1946) authoritative opinion that their ultimate decay was probably due as much to their capitulation 'to the immemorial and ancient influences of Canaan', as to the efforts of the Israelites and the Assyrians to subjugate them. Indeed, if the passage in I Kings is not invested with this significance, it is difficult to understand why the Hebrew chronicler laid so much emphasis upon the minor sequel of piles, and omitted any reference to the rectal discharge of blood and bloody mucus that is pathognomonic of dysentery, especially as the discharge of blood from any of the natural openings of the body, whether it was a physiological process or a pathological one, always aroused apprehension in ancient times. From very early times, dysentery has been known throughout the Old World as 'the bloody flux', and the Hebrew chronicler's omission of any reference to an issue of blood from the anus in the victims of the pestilence is therefore inexplicable, I submit, without the presumption that he attached an esoteric significance to the haemorrhoids.

There is still the third clue to be considered; to wit, the fact that the Gethrites, after deliberate consultation, made 'seats of skins' for themselves. To those who still opine that the pestilence of the Philistines was bubonic plague, the question may be put: Why should any sane individuals make themselves seats of skins as a palliative for bubonic plague? Of what conceivable use could a skin seat be to a person who is collapsed, delirious, and bedridden almost from the onset of that disease? If the 'emerods' were plague buboes, the action of the Gethrites was utterly nonsensical; but if, as I have argued, they were haemorrhoids, then anyone who has suffered from external piles will agree that the Gethrites showed good sense. The difference in comfort to the sufferer from piles between reclining upon a skin seat and sitting cross-legged upon the ground must be experienced to be appreciated, but I can assure the reader that it is profound.

At this point, an opportune reference may be made to the account in the Vulgate of the golden peace offerings that the Philistines made to Yahweh. The Vulgate says that they offered five golden images of mice and 'quinque aureos anos'. It would seem, therefore, that the compilers of the Vulgate were satisfied that the word opalim meant haemorrhoids, and that the Philistines made golden replicas of the anal ring with a haemorrhoid, or a cluster of piles, protruding from it, not a difficult matter for a reasonably expert goldsmith.

I cannot claim that my belief that the plague of the Philistines was dysentery is original, because Josephus (Whiston, 1793) states categorically that it was dysentery, and he also discriminates the epidemic from the simultaneous plague of mice. It is possible that Josephus had access to authentic material that has since been lost; it is certain that he was many centuries nearer the ancient Jewish tradition than we are, and, though it appears to be fashionable in some quarters to decry the value of tradition as an adjunct to history, it is not wise to ignore it. With the support of Josephus, I submit, therefore, that the plague of the Philistines was one of the forms of bacillary dysentery, either Shiga or a virulent Flexner dysentery, and that the 'emerods' were 'piles'.

The plague of the Philistines has been immortalized not only in Literature, but also in Art. Nicolas Poussin, the great French painter, who was born in a Normandy hamlet in 1594, painted his 'Plague of Ashdod' in Rome in 1630. Bryan (1930) says that Poussin's most striking characteristic 'is his intimate knowledge and appreciation of classic art'. During his lifetime there were many outbreaks of bubonic plague in Europe, and it is therefore not surprising to find that he identified the Philistine pestilence with that disease, and emphasized that identification by his inclusion of rats in his classical scene. Though his knowledge of Medicine and History was evidently negligible, the faculty of observation that made him a great painter apparently led him to recognize that there was some connexion between the presence of the rat and the existence of bubonic plague in man. His inclusion of rats, in his portrayal of the 'Plague of Ashdod', is the earliest recognition in Art of a relationship between their presence and human plague that I have so far encountered.

Whatever opinion is held about the nature of the pestilence that ravaged the Philistines, the fact that it caused them to return the Ark of the Covenant to the defeated and demoralized Israelites is indisputable. That restoration deprived the Philistines of the inestimable moral advantage which the possession of the Ark gave to them, and at the same time restored to the Israelites the focus upon which all their national activities and aspirations converged. I therefore affirm that this act, because it saved the Israelite society from almost certain extinction, must be ranked as one of the decisive acts in human history, and I draw support for that affirmation from the authoritative pronouncement of Osterly & Robinson (1932): 'Yet small and insignificant among the nations of the world as Israel was, without political influence or extended power, it may safely be said that no other people of antiquity holds a place of such profound importance in the history of human thought. It was Israel who gave to the world a religion which has directed the spiritual life of nearly half mankind, and, not only among the Jews themselves, but in the two daughter faiths of Christianity and Islam, has moulded the beliefs of men in every continent save central and eastern Asia.'

Commenting upon the importance of the poem in Judges v in connexion with its portrayal of early Israelite society, Manson (1946) remarks: 'We see clearly here the independence of the clans, who are united only by their common allegiance to Yahweh, and, even so, may stand aloof from the general body.' Without some omnipotent unifying force, it is improbable that such a society would have been able to achieve the domination of Palestine; but the requisite force was secured by the covenant that Moses made between the Israelites and Yahweh. 'Henceforward Israel was the people of Yahweh, and Yahweh was the God of Israel. By this great deed of mutual adoption He became an actual member of the group, sharing in its interests, its fortunes, and its future...' (Manson, 1946).

To a people of the nature and state of the early Israelites, an abstract conception of a deity was, however, untenable, and the genius of Moses is shown in his recognition of that fact, and in the provision that he made to ensure the permanence of the covenant by translating an abstract conception into a visible reality; for it was Moses who invented the Ark of the Covenant and bequeathed it to the Israelites as the earthly abode of Yahweh. Henceforward the Israelites possessed a visible sign of Yahweh's presence among them, and the Ark became the supreme authority in their domestic matters, and their chief judicial tribunal. Indeed, it would appear to be impossible to exaggerate the importance of the Ark to the Israelite society, because no treaty could be made without Yahweh's consent, no war could be waged save under His auspices (Osterley & Robinson, 1932), and no laws were valid without His blessing. He was the supreme authority in all the social, educational, political, legislative, and religious activities of the Hebrew confederacy; the force that unified their clans and gave to their confederacy a cohesion and purpose possessed by no other contemporary society-and the Ark of the Covenant was His earthly abode! With the loss of the Ark the foundations of the Israelite society collapsed, and its continued absence would have made that collapse irreparable, because only its speedy return could restore to the Israelites the unity without which their society would inevitably dissolve into a confusion of feeble, irresolute, and irreconcilable clans. The Philistines were well aware of the vital significance of the Ark to the Israelites, and there were great rejoicings in their five cities when it was sent round them on a victory tour. They certainly had no intention of restoring it to their beaten foe, but 'the hand of the Lord was heavy upon the Azotians, and he destroyed them....'

I submit, therefore, that the pestilence that forced the Philistines to return the Ark of the Covenant to Israel was a decisive event in History.

I wish to express my appreciation of the authoritative and generous assistance which Prof. G. R. Driver, M.A., Professor of Assyriology in the University of Oxford, has given to me in the preparation of this paper.

REFERENCES

Byran's Dictionary of Painters and Engravers (1930). Edited by G. C. Williamson. London.

Driver, G. R. Personal communications to the

author.

Manson, T. W. (1946). A Companion to the Bible. Edinburgh.

MEISSNER, B. (1907). 'Assyriologische Studien.' Mitt. Vorderasiat. Ges. XII, 3.

OSTERLEY, W. O. E. & ROBINSON, T. H. (1932). A History of Israel. Oxford.

SHREWSBURY, J. F. D. (June, 1947). 'Epidemic disease and history.' The Queen's Medical Magazine.

SIMPSON, W. J. (1905) A Treatise on Plague. Cam-

Topley and Wilson's Principles of Bacteriology and Immunity (1946). Third edition revised by G. S. Wilson and A. A. Miles. London.

The Works of Flavius Josephus (1793). Translated by W. Whiston. London.

WOOD, J. G. (1869). Bible Animals. London.

(MS. received for publication 23. vi. 49.—Ed.)